Abstract Submitted
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Vision in dinosaurs: Scaling effects in sclerotic rings SCOTT LEE, University of Toledo — Sclerotic rings are composed of bones found in the eyes of most vertebrates except mammals and crocodilians. They are believed to have a role in maintaining the shape of the eye. Their inner diameter is an upper limit for the effective diameter of the pupil and, therefore, provides a measure of the light-gathering ability of the eyes of extinct animals. Thirty-six different species of dinosaurs (from both the Saurischian and Ornithischian branches) have been studied. The smallest dinosaurs, with masses less than 1 kg, include *Juravenator starki*, *Archaeopteryx lithographica*, and *Mei long* while the largest dinosaurs, with masses on the order of 10,000 kg, include *Diplodocus longus* and *Nemegtosaurus mongoliensis*. The light-gathering properties of the eyes of the dinosaurs are studied as a function of the mass. The sclerotic ring diameter is found to increase with mass.

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